

CLAIMS LISTING

1-36. (Cancelled)

37. (Currently amended) A method comprising the step of administering a macrocyclic lactone, ~~a benzolactam, a pyrrolidinone or a combination thereof~~ to a subject in need thereof in an amount effective to decrease soluble A β -40 in said subject.

38. (Previously Presented) The method of claim 37, further comprising the step of identifying a subject with increased soluble A β -40 levels compared to a control population.

39. (Currently amended) The method of claim 37, wherein the macrocyclic lactone, ~~the benzolactam, the pyrrolidinone or the combination thereof~~ decreases mean soluble A β -40 by about 35%.

40. (Previously Presented) The method of claim 37, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof decreases the soluble A β -40 by between about 8% and 50%.

41. (Previously Presented) The method of claim 38, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof decreases mean soluble A β -40 by about 35%.

42. (Previously Presented) The method of claim 38, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof decreases the soluble A β -40 by between about 8% and 50%.

43. (Previously Presented) The method of claim 37, wherein the macrocyclic lactone is a bryostatin class or neristatin class compound.

44. (Previously Presented) The method of claim 43, wherein the bryostatin class compound is bryostatin-1 through bryostatin-18 or neristatin-1.

45. (Previously Presented) The method of claim 38, wherein the macrocyclic lactone is a bryostatin class or neristatin class compound.

46. (Previously Presented) The method of claim 45, wherein the bryostatin class compound is bryostatin-1 through bryostatin-18 or neristatin-1.

47. (Previously Presented) The method of claim 37, wherein the subject suffers from a neurological disease or disorder.

48. (Cancelled)

49. (Currently amended) The method of claim ~~48~~ 47, wherein the neurological disease is Alzheimer's Disease.

50. (Previously Presented) The method of claim 38, wherein the subject suffers from a neurological disease or disorder.

51. (Cancelled)

52. (Currently amended) The method of claim ~~51~~ 50, wherein the neurological disease is Alzheimer's Disease.

53. (Currently amended) A method comprising the step of administering a macrocyclic lactone, a benzolactam, a pyrrolidinone or a combination thereof to a subject in need thereof in an amount effective to decrease soluble A β -42.

54. (Previously Presented) The method of claim 53, further comprising the step of identifying a subject with increased soluble A β -42 levels compared to a control population.

55. (Previously Presented) The method of claim 53, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof decreases mean soluble A β -42 by about 59%.

56. (Previously Presented) The method of claim 53, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof decreases the soluble A β -42 by between about 25% and 77%.

57. (Previously Presented) The method of claim 54, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof decreases mean soluble A β -42 by about 59%.

58. (Previously Presented) The method of claim 54, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof decreases the soluble A β -42 by between about 25% and 77%.

59. (Previously Presented) The method of claim 53, wherein the macrocyclic lactone is a bryostatin class or neristatin class compound.

60. (Previously Presented) The method of claim 59, wherein the bryostatin class compound is bryostatin-1 through bryostatin-18 or neristatin-1.

61. (Previously Presented) The method of claim 54, wherein the macrocyclic lactone is a bryostatin class or neristatin class compound.

62. (Previously Presented) The method of claim 61, wherein the bryostatin class compound is bryostatin-1 through bryostatin-18 or neristatin-1.

63. (Previously Presented) The method of claim 53, wherein the subject suffers from a neurological disease or disorder.

64. (Cancelled)

65. (Currently amended) The method of claim ~~64~~ 63, wherein the neurological disease is Alzheimer's Disease.

66. (Previously Presented) The method of claim 54, wherein the subject suffers from a neurological disease or disorder.

67. (Cancelled)

68. (Currently amended) The method of claim ~~67~~ 66, wherein the neurological disease is Alzheimer's Disease.

69. (Currently amended) A method comprising the step of administering a macrocyclic lactone, ~~a benzolactam, a pyrrolidinone or a combination thereof~~ in an amount effective to lower total amyloid precursor protein ("APP").

70. (Previously Presented) The method of claim 69, further comprising the step of identifying a subject with elevated APP levels compared to a control population.

71. (Previously Presented) The method of claim 69, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof lowers mean total APP by about 40%.

72. (Previously Presented) The method of claim 69, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof lowers the total APP by up to about 67%.

73. (Previously Presented) The method of claim 70, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof lowers mean total APP by about 40%.

74. (Previously Presented) The method of claim 70, wherein the macrocyclic lactone, the benzolactam, the pyrrolidinone or the combination thereof lowers the total APP by up to about 67%.

75. (Previously Presented) The method of claim 69, wherein the macrocyclic lactone is a bryostatin class or neristatin class compound.

76. (Previously Presented) The method of claim 75, wherein the bryostatin class compound is bryostatin-1 through bryostatin-18 or neristatin-1.

77. (Previously Presented) The method of claim 70, wherein the macrocyclic lactone is a bryostatin class or neristatin class compound.

78. (Previously Presented) The method of claim 77, wherein the bryostatin class compound is bryostatin-1 through bryostatin-18 or neristatin-1.

79. (Previously Presented) The method of claim 69, wherein the subject suffers from a neurological disease or disorder.

80. (Cancelled)

81. (Currently amended) The method of claim ~~80~~ 79, wherein the neurological disease is Alzheimer's Disease.

82. (Previously Presented) The method of claim 70, wherein the subject suffers from a neurological disease or disorder.

83. (Cancelled).

84. (Currently amended) The method of claim ~~83~~ 82, wherein the neurological disease is Alzheimer's Disease.